Effectiveness Analysis of Agricultural Geological Environment Information Management System Construction on Agricultural Economic Management

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Abstract: The new century is an era of information reform. With the continuous improvement of agricultural geological environment information construction, agricultural geological environment information construction will further develop, and at the same time, higher requirements are imposed on agricultural economic management and related fields. Due to the perfect information system in the agricultural geological environment, there are problems in agricultural economic management. In this regard, the purpose of this article is to study the practical effects of constructing an agricultural geological environment information management system on agricultural economic management. In response to these problems, this article establishes and improves the agricultural economic management system to provide institutional guarantee for optimizing agricultural economic management. We will improve the agricultural financial support system and optimize agricultural production and marketing mechanisms and industrial structures. Strengthen agricultural infrastructure construction, improve technological innovation and integration, and provide basic guarantees for optimizing agricultural economic development and other management strategies. It can be seen from the conclusion of this article that the proportion of scientific and technological expenses in 2018 is 0.795, and the proportion is basically fluctuating. The conclusion shows that the construction of agricultural geological information environment has promoted the development of agricultural economy.

1. Introduction

With the advent of the era of economic globalization and knowledge economy, the contemporary world economy is entering the information age from the industrialization period. The wave of informatization characterized by digital technology is sweeping the world [1, 2]. Agricultural geo-environmental information has gradually become a favorable means and goal for the development of modern agriculture in many countries, and Chinese agriculture is developing in a diversified direction [3-6]. The continuous improvement of the level of information technology has laid the technical foundation for the development of China's agricultural economy. China is a large agricultural country, and agriculture accounts for a large proportion of national production. In the current big data environment, China's agricultural production materials will also develop in the direction of informationization [7]. The lack of vitality in agricultural economic development. In response to this situation, the state attaches great importance to agricultural economic management, and has continuously introduced preferential policies to promote the development of agricultural economy and promote the information management of agricultural geological environment.

The construction of China's agricultural geological environment informatization with modern

information technology began in the late 1970s. Professor Wang Renchao of Zhejiang University led the development of remote sensing and information technology applications for agricultural resources, growth monitoring and yield estimation of remote sensing rice, and monitoring and evaluation of agricultural environment. Research on agricultural remote sensing and agricultural resources information system [8,9]. After more than 20 years of development, China's agricultural research departments have achieved a number of important results in system development, databases, management information systems, expert systems, decision support systems, geographic information systems, and other fields, some of which have reached international advanced levels [10]. In the agricultural economic management, due to the lack of attention from the grass-roots agricultural management institutions and the lack of high-quality talents, these information technologies have not been used in agricultural economic management, resulting in continued inefficient agricultural economic management [11-13]. Generally speaking, China's agricultural geological environment informationization has entered a relatively stable development period.

The development of modern high-speed agricultural geological environment informationization is an important foundation for agricultural informationization construction. Utilizing new Internet technology, a large number of agricultural information subnets are integrated into one, thereby establishing a national agricultural information wide area network. And intelligently disseminate information to the agricultural geological environment information network, making agricultural production management more practical and scientific. The construction of agricultural geo-environment information network can improve the efficiency of agricultural technology promotion and promote the rapid development of agricultural production. We should also conduct effective research and development on various agricultural resource databases. The contents of these databases should include agricultural product market information, agricultural production management information, agricultural scientific and technological information, agricultural natural resource information, agricultural scientific research results, and agricultural practical technologies. Therefore, this paper analyzes and analyzes agricultural economic management data, puts forward suggestions for the current deficiencies in agricultural economic management development, and analyzes the impact of agricultural information management on agricultural economy.

2. Method

2.1. Informationization of agricultural geological environment

Agriculture, as the basic industry on which human beings depend, has gone through three stages: primitive agriculture, traditional agriculture and modern agriculture. Since the 20th century, with the gradual penetration of information technology such as electronic information, network communication, and automatic control into the agricultural field, information technology has become an important driving tool in the process of the new agricultural technology revolution. The informationization of agricultural geological environment has also become the informationization of the national economy. An important part of globalization. Informatization mainly refers to the digitization of information resources and the networking of information exchange services. This is a narrow concept of information technology. From the knowledge gained in practice, the informationization of agricultural geological environment is a broad concept. It should be the informationization of the entire agricultural process. It is equipping modern agriculture with information technology. Rely on information networks and digitalization to support agricultural management and monitoring management. Agricultural resources and the environment support agricultural economy and rural society informatization. Agricultural information technology includes agricultural information network, agricultural database system, management information system, decision support system, agricultural expert system, multimedia technology, precision agriculture and other fields. The connotation of agricultural geo-environmental information should include at least the following five aspects: farmers' consumption information, agricultural infrastructure information, agricultural science and technology information, agricultural management information, agricultural resources and environmental information. Agricultural

geo-environment informationization is the application of advanced information technology achievements to agricultural production, combining advanced agricultural production technology with information technology to improve agricultural production efficiency, promote agricultural information sharing, improve the accuracy of agricultural information prediction, and promote agriculture Rapid economic development.

2.2. Information Management System

Information management system refers to data-intensive human-computer interaction computer application system. Information management systems use computers to collect, process, disseminate and use information, and its main purpose is to provide information services. Agricultural geo-environment information system is the application of information management system in the agricultural field. According to the management and function of the information system, it can be divided into three levels: lower, middle and upper. The lower layer is electronic data processing, which is the basic data processing process that forms information. The middle layer is the management information system. At the top is the decision support system. At present, the development trend of information systems is simplified operation, system integration, information multimedia, functional intelligence and distribution. Agricultural geo-environment informationization refers to the full use of modern computer technologies such as network communications, databases, multimedia and artificial intelligence in the agricultural production and management process. The application of agricultural geo-environment information system has fully realized agricultural production information, management and other agricultural information. To a certain extent, the transformation of traditional agriculture has been accelerated, and agricultural production efficiency and scientific management have been greatly improved. The agricultural geo-environment information system promotes the sustainable and stable development of the rural economy. The basic functions of the agricultural geological environment information system will become the carrier of agricultural modernization. To a certain extent, the agricultural geo-environment information system can disseminate various agricultural production knowledge, agricultural high-tech achievements, and agricultural economic practice information to agricultural producers. Managers at all levels can also use it. It can provide producers with macro management information such as agricultural resource utilization, agricultural dynamic monitoring, and agricultural science and technology in a timely manner. The high-level function of the agricultural geo-environment information system is to provide decision support for agricultural producers and operators through computer-processed information, including macro-decision information on agricultural production in terms of rational fertilization, breeding and seeding, pest control, and agricultural structure optimization and disaster prediction, Specific guidance.

3. Experiment

This article collects the general situation of agricultural informatization development at home and abroad, collects relevant data, and organizes and analyzes it by consulting literatures, newspapers, magazines, and Internet searches. Consultation of various documents is a powerful means to understand the informationization of agricultural geological environment in foreign countries, and also a powerful means to understand the informationization of agricultural geological environment. Go deep into the forefront of agricultural production, and carry out an in-depth investigation and research on the current situation of agricultural geological environment informatization.

In the process of writing this article, I conducted surveys and interviews, visited some rural areas, asked them about their views on informatization, learned about the benefits of informatization to rural areas, and learned about the information infrastructure in rural areas. And by phone to other provinces to investigate the agricultural geological environment information. This paper compares the agricultural geological environment informatization between China and other countries in the world, compares the development status of agricultural economy before and after agricultural geological environment informatization, and demonstrates the role of agricultural geological

environment informatization on agricultural geological environment informatization.

4. Discuss

4.1. Basic conclusions of agricultural geological environment information

Due to the limitation of statistical data, the three data items are the total output value of the agricultural electronic information industry, the added value of the agricultural electronic information industry, and the fixed asset investment of agricultural geological environment informationization. The electronic information industry's fixed asset investment is calculated by multiplying the agricultural output value by the ratio of GDP. The number of computers in each home is shown in Figure 1.

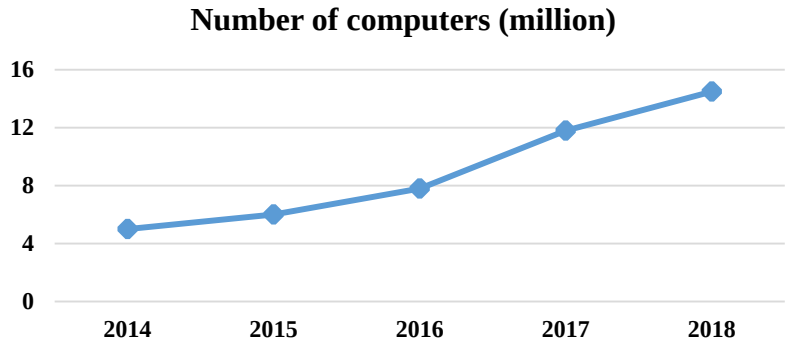

Figure 1. Changes in the number of computers owned by rural households

It can be seen from Figure 1 that from 2014 to 2018, the number of computers owned by rural households in China generally increased, from 100 to 100. Although the penetration rate is still low, the increasing trend shows that computers are gradually replacing TVs and become an important part of the production and life of rural residents. Especially with the popularity of the Internet, computers will become rural residents to obtain information, learn knowledge and The main tool of technology.

With the development of the Internet, the information environment of the agricultural geological environment has changed. Agricultural economic management informationization is conducive to the transformation of agricultural economic models in various parts of our country to modern models. The proportion of agricultural science and technology expenditure is shown in Table 1.

Table 1. Expenditure for agricultural science and technology

Years	2014	2015	2016	2017	2018
Technology Cost Ratio	0.76	0.78	0.75	0.79	0.795

It can be seen from Table 1 that the proportion of China’s three major agricultural science and technology expenditures in agricultural expenditures has basically fluctuated, which indicates that as China’s agricultural expenditures continue to increase, three agricultural science and technology expenditures have also increased accordingly. However, the overall growth rate and the number of agricultural expenditures are almost the same, which shows that the three major costs of agricultural science and technology in our country still cannot meet the needs of modern agricultural development and cannot keep up with the pace of agricultural development. China's agricultural geology and environmental informatization should attract the attention of relevant departments and be further improved.

4.2. Research on agricultural economic management optimization strategies in the context of agricultural geological information management

The agricultural operation subject under the management of agricultural geo-environmental information has strong development potential in rural construction, reflecting the sound development of the rural economy. It is an important goal of rural economic development and plays

an important role. In order to grasp the development opportunities of the agricultural geological information environment, relevant government departments should proceed from the current situation of rural economic development, combine their own conditions, explore the problems existing in rural economic construction, and strengthen agricultural economic management. The actual situation, and increase support for the operating entities of the rural economy, especially agricultural enterprises and agricultural product distribution organizations that play a driving role in the development of agricultural economics, increase their policy support and special fund subsidies to expand their influence and driving force the scale of agricultural cultivation. In addition to the above support for business units, relevant departments must also protect the basic rights and interests of downstream farmers through policies. The agricultural economy guarantees stable development through the joint action and mutual influence of the three parties.

Strengthen the construction of agricultural infrastructure. Inadequate agricultural infrastructure construction is an important factor affecting China's agricultural productivity. Therefore, managers also need to increase the intensity of agricultural infrastructure construction, continuously improve the existing problems in the construction of agricultural infrastructure, and improve the level of agricultural economic management. For example, the construction of agricultural power grids, shelter forest networks, agricultural machinery road networks, etc. Improve the benefits of stable farmland by strengthening agricultural infrastructure. Speed up the improvement of agricultural mechanization. Applying agricultural machinery to agricultural construction can effectively improve work efficiency, reduce human resources consumption capital, and promote China's agricultural economy to modernize and develop science and technology. In order to improve the capability of agricultural mechanization, not only need to increase the training of professional agricultural mechanization personnel, but also increase investment in the agricultural machinery market to ensure the safety of agricultural machinery and ensure after-sales work.

Conclusion

As an important part of China's national economic and social informatization, agricultural geo-environment informatization is not only a necessary way and means to build a new socialist countryside, but also an urgent task to accelerate China's modern agricultural construction. And has improved the competitiveness of the agricultural market. The smooth progress of agricultural geological information construction will provide huge support for agricultural development. This will not only help to improve the level of agricultural production, promote the reform of the agricultural market economic system, and improve the efficiency of agricultural operations and management. While constructing agricultural geo-environment information, it also helps to solve the "three rural" issues. The development of agricultural economy has ushered in a good prospect. Opportunities and challenges co-exist. As grassroots agricultural economic managers, we must pay attention to problems and challenges in real development. The improvement of the fertile growth space system of agricultural economic development, the attention of the state and society, and the innovation of management methods must be provided to meet new requirements. New requirements for the transformation and development of agricultural economy in the rural context.

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